Haemorrhage whether antepartum (APH), postpartum (PPH), abortion or ectopic pregnancy related, remains one of the major killers of childbearing women all over the world.\(^1\) In Pakistan, audit into the causes of maternal mortality in public and private hospitals, points towards postpartum haemorrhage as the main cause of death after childbirth.\(^2\)

Even highly skilled obstetricians can be incompetent when dealing with women in dire situations of life and death without access to life saving medicines and safe blood transfusion services. This can happen even in the best equipped hospitals in the major cities of Pakistan. The majority of deliveries occur at home under the supervision of traditional birth attendants or "dais". However, this may be changing as more and more women are choosing to go to hospitals or maternity homes for their delivery. Most rural areas lack emergency obstetric care facilities. Poor transportation and lack of financial resources further complicate matters. Women often become pregnant without planning in a less than ideal nutritional state. Pre-pregnancy anaemia is common. Lack of empowerment, especially for rural women results in seeking medical attention, often when it is too late. Their lack of nutritional reserve, leaves very little margin of error for the health professional when faced with a bleeding pregnant or recently delivered woman.

If Pakistan is to achieve the ambitious Millennium development goals to reduce maternal mortality ratio by 75% (from 1990 levels) by the year 2015, it has to work very aggressively towards prevention.\(^3\) The task facing its government and health care professionals is Herculean, by any standards. It seems very unlikely that Pakistani women will suddenly become empowered, get married at later ages, enjoy better health, nutrition and social status; rural health centers are unlikely to have facilities to function as secondary or tertiary health care centers, or alternatively transportation would improve with well equipped ambulance services. At present most ambulances in Pakistan are merely transport vehicles without trained paramedical staff or emergency equipment and drugs. Emergency drugs and safe blood transfusion services are unlikely to be available freely across Pakistan in the near future.

There has been immense improvement in communication in Pakistan with mobile phone services in the remotest of areas at affordable rates for the common man. This has certainly improved accessibility to health care, as the right advice can be given at the right time by senior experts to doctors (and patients) practicing in remote areas, provided they have access to well equipped facilities. However, even the most knowledgeable and skilled doctor is unable to save a mother's life if she is bleeding, and he/ she has no drugs or blood at hand.

Greater attention needs to be directed to preventive measures that may be adopted, and practiced by obstetricians. They could help to propagate these amongst other health care professionals and traditional birth attendants. For example: detection and correction of anaemia in the antenatal period. Women who enter pregnancy with a normal haemoglobin are more likely to survive should they experience haemorrhage during or after their pregnancy. We know that the commonest cause of direct maternal death is PPH; and the commonest cause of PPH is uterine atony, which cannot be predicted in the majority; and most deaths occur within 2 hours of childbirth. Vigilance in this period in the form of uterine massage every 15 minutes by the health care attendant, patient attendant or the recently delivered mother herself has been shown to reduce blood loss significantly. This has been advocated in a joint International Confederation of Midwives (ICM) and International Federation of Gynaecologists and Obstetricians (FIGO) Statement for low resource settings\(^4\), where there may be no oxytocics available for active management of the third stage of labor (AMTSL). In Pakistan, where the temperatures in summer often exceed 40 degrees Celsius, the efficacy of Oxytocin even when available is questionable, as it requires cold storage and transport. Ergometrine is even more thermo labile as well as sensitive to light.\(^5\) All practicing Pakistani obstetricians need to familiarize themselves with Misoprostol as an essential life saving drug, which can be used for both prevention and treatment of PPH.\(^5,6\)
Misoprostol 600mcg orally, has been shown to be an effective alternative to Oxytocin 10 units IM, when the latter is not available. Misoprostol, although more expensive than Oxytocin, carries a huge advantage of being effective orally, the tablets can be stored at room temperature and can be administered by the delivering woman herself within one minute of birth upon instruction by her delivering doctor or midwife. It would be easier to maintain stocks of Misoprostol in remote areas without refrigeration facilities. Three 200 mcg tablets of Misoprostol may and provide safe delivery kits to rural areas. The efficacy of oxytocin may be improved if it can be "piggy-backed" to distribution and dispensing of vaccines in Pakistan, as the cold-chain would be ensured. The health department needs to ensure that these essential drugs are available all over the country. Blood Banks need to be developed in every facility where deliveries take place, and a culture for blood donation has to be developed amongst the masses through media campaigns, so that screened blood from healthy donors is available when a bleeding catastrophe occurs. Blood donation should be encouraged as a personal "zakat" or charity, and transfusion only reserved for life threatening situations like massive PPH.

Another factor which contributes to uterine atony is prolonged or obstructed labour. This can be effectively prevented by the use of Partograms to monitor progress during labor. All Obstetricians, especially those in teaching hospitals, need to introduce this in their labour wards, if not already in use, and train both medical and paramedical staff in maintaining this record. The Partogram allows prevention of not just PPH, but also ruptured uterus, neonatal morbidity and mortality and future potential for vesico-vaginal fistula development, with its socio-economic implications.

References

Original Article

Diagnostic value of tear films tests in type 2 diabetes
Atiya Rahman, Kamran Yahya, Tabussum Ahmed, Khwaja Sharif-Ul-Hasan
Department of Ophthalmology, Baqai Medical University, Karachi.

Abstract

Objective: To compare the diagnostic value of Schirmer's tests, Rose Bengal test, and Tear Film Breakup Time test in patients with type 2 Diabetes.

Methods: Two hundred eyes of 100 patients were seen at the department of ophthalmology, Baqai Medical University Hospital who presented with complaints of redness and burning sensation and were aged between 45 to 75 years. Any history of systemic illness was recorded such as diabetes mellitus and hypertension. All subjects underwent routine ophthalmic examination and tear film tests such as Schirmer's test, Rose Bengal test and tear film break up time test.

Result: Total numbers of eyes subjected to Tear Film Tests were 200, of which 92 (46.0%) belonged to patients with type 2 Diabetes. Schirmer's test was positive in 56 (60.86%) eyes of Rose Bengal test was positive in 80 (86.95%) eyes and Tear film break up time test was positive in 50 (54.34%) eyes. Among non diabetics Schirmer's test was positive in 30 (68.18%) eyes, Rose Bengal test was positive in 10 (22.72%) eyes and tear film break up time test was positive in 24 (54.54%) eyes.

Conclusion: Keratoconjunctivitis sicca is another manifestation of Diabetes Mellitus. The ocular surface disease could be confirmed by performing multiple tear film tests. Among these tests Schirmer's test and Rose Bengal test have more diagnostic value in patients with type 2 diabetes as compared to Tear Film Break - up time test (JPMA 57:577;2007).